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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,802	03/18/2004	Toshio Sakai	HEIW:006A	5105

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EXAMINER	
DONG, DALEI	

ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/802,802	SAKAI ET AL.	
	Examiner	Art Unit	
	Dalei Dong	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 19-25* is/are pending in the application.

4a) Of the above claim(s) *19-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/18/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-10 are, drawn to an apparatus for producing an organic EL display device, classified in class 445, subclass 66.

II. Claims 19-25 are, drawn to a process for producing an organic electroluminescent display device, classified in class 445, subclass 24.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and Group II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, a vacuum chamber and heater can accomplish the claimed method. Invention of Group II is classified in a different subclass, therefore provides extra burden upon the Examiner and thus restriction is deemed proper. The criteria for establishment of restriction is if it can be shown that the process and the apparatus for manufacturing an organic EL display device can be accomplished by an entirely different process as claimed by applicant. Because the method of making and the apparatus for manufacturing of an organic EL display device are distinct invention as acquired a separate status in the art as shown by their different classification, restriction for examiner purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventor is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

During a telephone conversation with Mr. Charles A. Wendel on March 20, 2006 a provisional election was made with traverse to prosecute the invention of an apparatus for producing an organic EL display device, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,786,789 to Sakai. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed invention is being anticipated by the prior art.

Claim 1 of the present claimed invention, is being anticipated by claim 1 of Sakai.

Claim 2 of the present claimed invention is being anticipated by the claim 2 of Sakai.

Claim 3 of the present claimed invention is being anticipated by the claim 3 of Sakai.

Claim 4 of the present claimed invention is being anticipated by the claim 4 of Sakai.

Claim 5 of the present claimed invention is being anticipated by the claim 5 of Sakai.

Claim 6 of the present claimed invention is being anticipated by the claim 6 of Sakai.

Claim 7 of the present claimed invention is being anticipated by the claim 7 of Sakai.

Claim 8 of the present claimed invention is being anticipated by the claim 8 of Sakai.

Claim 9 of the present claimed invention is being anticipated by the claim 9 of Sakai.

Claim 10 of the present claimed invention is being anticipated by the claim 10 of Sakai.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,049,167 to Onitsuka in view of U.S. Patent No. 5,433,639 to Zahuta.

Regarding to claim 1, Onitsuka discloses in Figures 1-10, an apparatus for producing an organic EL display device (D10) that has at least a lower electrode (D11),

an organic luminescent medium (D13) and an upper electrode (D15), the periphery of the device being sealed with a sealing member (D60 and D30), the apparatus comprising: a first unit (robot 2 carrying the substrate wafer 4 in at entrance 10) for carrying the support substrate (4) in, a second unit (the fore-chamber 120, see column 10, lines 26-32), thereby conducting a dehydration treatment, a third unit (11-15) comprising at least one device selected from a vapor depositing device, a sputtering device, an ion plating device, an electron beam evaporation device, a chemical vapor deposition device, a metal oxide chemical vapor deposition device, and a plasma enhanced chemical vapor deposition device for forming the organic luminescent medium and the upper electrode (see column 12, lines 31-38 and see column 13, lines 12-25), and a fourth unit (130) for sealing the periphery with the sealing member (D30 and D60), and carrying units being set up between the respective units (the EL device is being carried or transferred between the respective units).

However, Onitsuka does not disclose heating the supporting substrate before forming the organic luminescent medium.

Zahuta teaches in Figures 1-3, an apparatus for producing an organic EL display device comprising: a second unit (98) for heating at least the supporting substrate for cleaning before forming the organic luminescent medium for the purpose of cleaning the supporting substrate to prevent impurity from contaminating the organic EL display device.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the cleaning chamber of Zahuta for heating

the supporting substrate for the apparatus of Onitsuka in order to clean the support substrate to prevent impurities from contaminating the organic EL display device.

Regarding to claim 2, Onitsuka does not disclose the first unit is arranged between the second unit and the third unit, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have arrange the first unit between the second unit and the third unit in accordance to the design specification of the apparatus for producing an organic EL display device.

Regarding to claim 3, Onitsuka discloses in Figures 1-10, the second unit (120) is composed of a heating room (shown in Figure 4) and the a cooling room (the cooling can be achieved in the same room as the heating room, once the heater is stopped or removed from the chamber).

Regarding to claim 4, Onitsuka discloses in Figures 1-10, the second unit (120) is provided with at least one of an inert gas circulating device (141), a pressure-reducing device (161), and a cooling device.

Regarding to claim 5, Onitsuka discloses in Figures 1-10, the first unit (robot 2 within the vacuum vessel 1) is provided with at least one of an inert gas circulating device, a pressure-reducing device (the vacuum vessel has to be connected to a pressure-

reducing device in order to maintain a high degree of vacuum), and a cooling device (the arms of the robot 2 can hold the substrate wafer to cool the substrate).

Regarding to claim 6, Onitsuka discloses in Figures 1-10, the fourth unit (130) is connected to the first unit (robot 2 via other chambers).

Regarding to claim 7, Onitsuka discloses in Figures 1-10, the second unit (120) is made in common with the fourth unit (130, where second unit and fourth unit are common to the gas tight working chamber 100).

Regarding to claim 8, Onitsuka discloses in Figures 1-10, the third unit (11-15) is further comprises a vacuum evaporation device having plural evaporation sources for evaporating plural samples simultaneously or successively (see column 12, line 18 to column 13, line 28).

Regarding to claim 9, Onitsuka discloses in Figures 1-10, the third unit (11-15) comprises a buffer room (the vacuum vessel 1 where robot 2 and holder 3 are located), a vacuum evaporation device (11 shown in Figure 6), and a sputtering device (15 shown in Figure 7).

Regarding to claim 10, Zahuta teaches in Figures 1-3, a plasma-cleaning device (see column 5, lines 42-62) and the motivation to combine is the same as above in claim 1.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art are cited to further show the state of the art of composition of an apparatus for producing an organic EL display device.

U.S. Patent No. 6,132,280 to Tanabe.

U.S. Patent No. 6,776,880 to Yamazaki.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (571)272-2370. The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571)272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.D.
March 20, 2006

Karabi Guharay
Primary Examiner
Art Unit 2879